Research Note

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RESEEDING ABANDONED FARM LANDS TO CRESTED WHEATGRASS WILL INCREASE RANGE CAPACITY

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Reseeding abandoned farm land to crested wheat to increase forage production is one of the most practical ways in which Montana's stockmen can help meet the enormous wartime and postwar demand for livestock products.

Reseeding of abandoned fields has made rapid strides during recent years. Probably close to a million acres have been successfully reseeded. It is estimated, however, that in the neighborhood of 2,000,000 acres of abandoned land in Montana is still producing so little feed that reseeding would pay big dividends.

That reseeding abandoned fields to crested wheat is a paying proposition is shown by the experiences of many stockmen who have tried it, and is supported by the findings of state and government research agencies.

Wallis Huidekoper of Twodot, in his articles in the Montana Stockgrower of August 1942, tells of his experience in calving 450 cows on 540 acres of crested wheatgrass during April and May, 1942. He says in part, "It was the easiest calving I ever experienced, but I attribute it to the freshness, palatability and strength-giving qualities of the green grass on which they were running." In June he branded a 91 percent calf crop from this herd.

G.C. Morton of Lewistown, who manages a number of ranches in Fergus and Judith Basin counties, has had a great deal of experience in establishing and using crested wheat during the past 15 or more years. He is very enthusiastic about its possibilities.

Provides Earlier Grazing

He has been using it extensively for early spring lambing and calving pasture and feels that it has been a major factor in helping to improve the number and quality of lambs and calves saved. He has found that crested wheat usually furnishes good grazing a week or two earlier than local native or cheatgrass range, and by taking advantage of this and the fact that crested wheat can be used until early July has been able to build up his native range by deferring use on it until late spring.

In July 1942 a 198-acre field on a rocky ridge on the Big Coulee ranch west of Straw produced 115.5 tons of excellent quality hay. This field had been grazed to the ground by a band of sheep until mid-May. Two other fields on the same ranch which were used more lightly in early spring both produced better than a ton of hay per acre in late June. By taking advantage of such "bonus" hay crops in good years like 1942, a good feed reserve has been built up on this ranch to help out in dry years. Mr. Morton has found that the best hay is produced from crested wheat when cut in early head before bloom. This finding is confirmed by feeding experiments conducted at Moccasin by the Montana State Agricultural Experiment Station.

Through Mr. Morton's experience in seeding several thousand acres of abandoned fields to crested wheat, he has found that stands are established more readily on the most recently cropped fields. Seeding into new stubble land is a cinch. As weeds, and especially cheatgrass, increase, establishment of crested wheat is slower. He has had very few failures, although some of the more recent seedings made in heavy cheatgrass without soil preparation look very doubtful at this time. He has been hiring most of the seeding done during the past several years at a total cost of approximately $1.00 per acre including labor, equipment and seed. He drills 10 pounds per acre in 6-inch rows and favors using enough seed to get a quick stand and early weed control.

Stanley Antrim of Stevensville was getting plenty of good green feed from a 2-year-old stand of crested wheat during the first week of April 1943, a week or 10 days before he felt that his sheep could use an adjacent cheatgrass field. Mr. Antrim is systematically reseeding his abandoned fields to crested wheat.

These experiences suggest that whether certain fields are producing crested wheat or weeds may make the difference between profit and loss on many a ranch unit.

Getting Best Results

Experience has shown that the presence or absence of heavy stands of cheatgrass is usually a deciding factor concerning the ease of seeding and the method which must be used to insure best success.

Fields without dense stands of cheatgrass can usually be reseeded successfully by inexpensive methods. Drilling into the unprepared seedbed on grain stubble or even into rather heavy stands of summer growing annual weeds such as sunflower, Russian thistle, mustard, etc. is the most dependable method. Broadcast and harrowing, especially with a spring-tooth harrow, have also given good results in many cases. If you have fields in this condition, reseed them this fall before they are taken over by cheatgrass.

Fields heavily infested with cheatgrass are a more difficult proposition and thus far no cheap, easy method has been found dependable for seeding them. It has usually been necessary to largely eliminate the competition from cheatgrass before seeding in order to get a stand.

Though numerous cheaper methods such as burning, harrowing, spring-toothing, disking, etc. have been tried, nothing short of a good plowing has yet proved dependable. Even with plowing, it is important that a good job be done. The best time seems to be in the late fall after most of the cheatgrass has germinated or in the spring before new seed is formed. When seeding is done on fresh plowing, packing to prevent too rapid drying out is usually worthwhile. Drilling, provided too deep covering is avoided, is the favored method of seeding on plowed ground, although broadcasting and harrowing is at its best under these conditions and has given many good results. Although plowing is considered too expensive by some, others who have tried it would rather stand this expense with the added chance for success than to risk wasting seed and labor by seeding into cheatgrass by cheaper methods.

A method designed to get the advantages of plowing and at the same time getting prompt returns from the investment is being put to test both experimentally and on a practical basis in the Bitterroot Valley this year. A prominent rancher had about 160 acres of dense cheatgrass plowed under and seeded to wheat this spring. This fall he is seeding crested wheatgrass into the wheat stubble which is practically free of cheatgrass and weeds and presents as fine a seedbed as one could wish.

The wheat crop produced, though not a money maker, was about enough to meet the cost of plowing and harvesting. A modification of this method which might be safer in dry years would be to cut the small grain for hay or pasture rather than risk a failure by leaving it for grain. The method is being tested by this Station on an experimental basis, using a number of different crops.

How To Do It

The general pointers which follow are a summary of the best information available on reseeding abandoned fields in Montana. They are based on years of research by the Northern Rocky Mountain Forest and Range Experiment Station, and other research agencies, and on reports of the practical experience of numerous farmers and ranchers in many parts of the State. Although it is realized that conditions may vary considerably from one locality to another, these general rules are believed to be a safe guide for use on most abandoned farm land in any part of the State.

What To Seed:

Crested wheat is the outstanding species for seeding abandoned farm land in Montana. Although many species have been tested and a few have shown promise under special conditions, crested wheat is the only one which can be recommended for general use. Under the dry conditions which usually prevail, this species should be seeded without a nurse crop.

Seedbed Requirements:

The ideal seedbed for crested wheat is firm but mellow, free from other growing vegetation and smooth enough to allow good operation of equipment. Clean grain stubble meets these requirements very well. The nearer your seedbed meets these requirements the better your chances for success.

When To Seed:

Middle to late fall and early spring are the safest times, although good results have been obtained at other times when weather was favorable. Do it now--don't put it off! Seeding this fall or next spring will give results a year sooner than your next best chance.

How To Seed :

Use a grain drill if you have it. If not, good results have been obtained by broadcasting and covering with a spring-tooth, disk or even a spike-tooth harrow.

Depth To Cover:

About 3/4 inch of mineral soil has been found to be best for crested wheatgrass. A little less is required on heavy soil and a little more on sandy soil under droughty conditions.

Rate Of Seeding :

Under ideal conditions 3-5 pounds of seed per acre have given fine stands. Under average conditions 5-7 pounds for drilling in 12-16 inch rows and 8-10 pounds for 6-8 inch rows are good amounts to use. Broadcasting usually requires about 50 percent more seed than drilling to get the same stand. Condition of the drill may determine the row spacing to be used. If the drill cannot be shut down to seed as little as 10 pounds per acre, it might be best to close every other seed spout and seed in 12-16 inch rows which will cut the drill's minimum seeding rate in half.

Early Protection :

Protection from grazing during the first growing season is usually advisable. Deferring use until growth is well along the second and third years will help the stand to get firmly established.

Don't Plow It Under :

Crested wheat seedlings may be very small and fine during the first season if growing conditions are poor and the stand may seem to have disappeared entirely by midsummer. In many cases fields which were considered failures the first year have developed into fine stands in a year or two.

Hundreds of experienced ranchers in Montana are now seeding crested wheat into their abandoned fields with much the same attitude that they seed their other crops and with much the same chances for success. These men are finding out how good it feels to have a dependable grass crop in sight for next spring and to have a few extra stacks of hay on hand to help them through a dry year or hard winter.

Reseeding is out of the "hit-and-miss" stage if advantage is taken of the experience of those who have been doing it for years.

Reseed those abandoned fields now. Crested wheatgrass will get them back into the production line to help win the war and the peace, and to put extra dollars in your pockets as well.

Farmers' Bulletin No. 1924, "Reseeding to Improve the Yield of Montana Range Lands," may be had on request from the Director of the Northern Rocky Mountain Forest and Range Experiment Station, Missoula, Montana. This publication gives information on range reseeding in greater detail than is possible in this article.

NOTE: This is a copy of Friedrich's article as it appeared in the October 1, 1943 issue of the Montana Farmer.